

Amendments to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): An apparatus for stacking semiconductor wafers, comprising:

a housing having:

an open top and open bottom enabling access to an interior cavity of the housing,

an open side enabling access to the interior cavity, and
the interior cavity having a plurality of supports spaced at fixed vertical intervals inside the housing enabling a plurality of wafers to be horizontally supported in a vertically spaced apart arrangement, the supports further adapted to enable the configured to releasably maintain a plurality of semiconductor wafers to be raised upwardly out of the housing; in fixed positions relative to said housing in a are maintained in a separated;

a transfer guide proximate to the open side of the housing, the transfer guide having a plurality of supporting splines arranged in registry with the supports of the housing such that wafers can be slid directly from the splines to an associated set of supports; configured to facilitate the transfer of the plurality of semiconductor wafers into the housing;

a receptacle for receiving a cassette in a position enabling alignment with the transfer guide, such alignment arranging the wafers such that they are in alignment with the splines of the transfer guide thereby enabling the wafers to be slid directly from the cassette onto an associated set of ssplines of the transfer guide; and

an elevator a member configured to pass upwardly through the open bottom of the housing detaching the semiconductor wafers from the supports and the housing and lifting the wafers upwardly so as to collect the semiconductor wafers into a stack.

Claim 2 (Cancelled).

Claim 3 (Currently Amended): The apparatus of claim 1 [[2]] wherein said each support is a flexible support configured to deform so as to flexibly release ~~said one~~ each of the

semiconductor wafers onto the stack as the elevator passes upward through the interior cavity of the housing.

Claim 4 (Currently Amended): The apparatus of claim 1 [[2]] wherein said each support is configured to pivotably release said one of the semiconductor wafers onto the stack.

Claim 5 (Currently Amended): The apparatus of claim 2 [[1]] wherein each semiconductor wafer is supported by a set of at least two flexible supports. further comprising a transfer arm for directing the plurality of wafers through the transfer guide and into the housing.

Claim 6 (Currently Amended): The apparatus of claim 1 wherein the elevator comprises member-is a basket configured to move within the housing so as to detach the semiconductor wafers from the housing and collect the semiconductor wafers into the stack.

Claim 7 (Currently Amended): The apparatus of claim 5 [[6]] wherein each set of at least two flexible supports comprises three flexible supports arranged about the edges of each supported wafer. further comprising a lift attached to the basket, the lift configured to move the basket within the housing so as to detach the semiconductor wafers from the housing and collect the semiconductor wafers into the stack.

Claim 8 (Currently Amended): The apparatus of claim 1 wherein the splines of the transfer guide extend in a horizontal direction a sufficient length to support the wafers in a horizontal orientation as they are transferred through the guide into the interior of the housing.

~~An apparatus for stacking semiconductor wafers, comprising:~~

~~a housing having supports for releasably engaging a plurality of semiconductor wafers; and~~

~~a basket configured to receive said plurality of semiconductor wafers, said basket further configured to disengage said wafers from said supports, and to manipulate said wafers into a stack.~~

Claims 9-14 (Cancelled).

Claim 15 (Currently Amended): The apparatus of claim 1 ~~[[14]]~~ further comprising a transfer arm arranged for directing said wafers horizontally through said guide and into said housing.

Claim 16 (Currently Amended): A method of stacking semiconductor wafers, comprising:
providing a plurality of semiconductor wafers arranged in a cassette;
providing a wafer stacking apparatus having a housing with an interior cavity that includes a side opening and top and bottom openings and includes supports arranged in the interior cavity that are configured to releasably support the plurality of semiconductor wafers in a vertically separated arrangement, the apparatus further including a transfer guide positioned adjacent to the side opening of the housing and having transfer slots aligned with associated supports of the housing arranged to facilitate the transfer of the wafers from the cassette through the transfer guide into the housing through the side opening and onto the supports;

arranging the cassette on the wafer stacking apparatus such that it is positioned proximal to the transfer guide and arranged so that the wafers in the cassette are in alignment with transfer slots of the transfer guide;

~~positioning a plurality of semiconductor wafers proximate to a housing, the housing having top and bottom openings and a side opening enabling ingress of wafers into the housing, the housing further including supports configured to releasably hold the plurality of semiconductor wafers;~~

transferring the plurality of semiconductor wafers into the housing by horizontally pushing the wafers onto the transfer slots of the transfer guide and through the ~~[[a]]~~ transfer guide to direct that directs the wafers through the side opening of the housing onto the supports so that the wafers are releasably held by the supports within the housing;

releasing the plurality of semiconductor wafers from the supports by lifting the wafers upwardly from the supports thereby collecting ~~so as to collect~~ the plurality of semiconductor wafers into a stack.

Claim 17 (original): The method of claim 16 wherein said releasing further comprises flexibly releasing the plurality of semiconductor wafers from flexible supports and onto said stack.

Claim 18 (original): The method of claim 16 wherein said releasing further comprises pivotably releasing the plurality of semiconductor wafers from pivotable supports and onto said stack.

Claims 19-21 (cancelled).

Claim 22 (Currently Amended): The method of claim 16 wherein said releasing comprises lifting the wafers from the supports using a lift driven support that moves upwardly through the open bottom of the housing pushing the wafers upward and releasing the wafers from the housing as the lift member elevates thereby passes upward through the interior of the housing stacking the wafers one after the other as the lift rises to push the wafers out of the top opening of the housing.